

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

DEC 2 8 2011

REPLY TO THE ATTENTION OF:

<u>CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

Mark Potochnik, Environmental Manager Solvay Advanced Polymers 17005 State Route 7 Marietta, Ohio 45750

Re:

Finding of Violation

Solvay Advanced Polymers

Marietta, Ohio

Dear Mr. Potochnik:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Solvay Advanced Polymers (Solvay or you). We find that you are violating Section 112 of the Clean Air Act (CAA), 42 U.S.C. § 7412, at your Marietta, Ohio facility.

We have several enforcement options under Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3). These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

The CAA requires EPA to develop National Emission Standards for Hazardous Air Pollutants (NESHAP) to protect the public health and welfare. To attain and maintain these standards, EPA promulgated Maximum Achievable Control Technology (MACT) standards to address Hazardous Air Pollutant (HAP) emissions from various source categories. Solvay is in violation of the MACT standards that regulate HAP emissions from Miscellaneous Organic Chemicals Manufacturing, 40 C.F.R. Part 63, Subpart FFFF (Subpart FFFF), the MACT standards that regulate HAP emissions from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (Subpart G), and the MACT standards that regulate HAP emissions from Equipment Leaks (Subpart UU).

We are offering you the opportunity to request a conference with us about the violations alleged in the FOV. The conference will give you the opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent you at this conference.

The EPA contact in this matter is Katharina Bellairs. You may call her at (312) 353-1669 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Cheryl L. Newton

Director 1 -

Air and Radiation Division

Enclosure

cc: Bob Hodanbosi, Ohio Environmental Protection Agency

United States Environmental Protection Agency Region 5

In the Matter of:)
Solvay Advanced Polymers, LLC) FINDING OF VIOLATION
Marietta, Ohio)
, .) EPA-5-11-OH-06
Proceedings Pursuant to)
the Clean Air Act,)
42 U.S.C. §§ 7401 et seq.)
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FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that Solvay Advanced Polymers ("Solvay") is violating Section 112 of the Clean Air Act, 42 U.S.C. § 7412. Specifically, Solvay is violating the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemicals Manufacturing at 40 C.F.R. Part 63, Subpart FFFF, the NESHAP for the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater at 40 C.F.R. Part 63, Subpart G, and the NESHAP for Equipment Leaks – Control Level 2 at 40 C.F.R. Part 63, Subpart UU, as follows:

Regulatory Authority

NESHAP for Miscellaneous Organic Chemicals Manufacturing (Subpart FFFF)

- 1. On November 10, 2003, EPA promulgated Subpart FFFF, 68 Fed. Reg. 63888 (November 10, 2003). The owner or operator of an affected source as of November 10, 2003 must comply with the provisions of this subpart no later than May 10, 2008, as required under 40 C.F.R. § 63.2445(b).
- 2. Subpart FFFF, at 40 C.F.R. § 63.2440, applies to each miscellaneous organic chemical manufacturing affected source, which is the facility wide collection of miscellaneous organic chemicals manufacturing process units (MCPUs) and heat exchange systems, wastewater, and waste management units that are associated with materials described in 40 C.F.R. § 63.2435(b)(1).
- 3. Subpart FFFF, at 40 C.F.R. § 63.2435(a), applies to owners or operators of MCPUs that are located at, or are part of, a major source of hazardous air pollutant (HAP) emissions, as defined in Section 112(a) of the CAA, 42 U.S.C. § 7412(a).
- 4. Subpart FFFF, at 40 C.F.R. § 63.2435(b), states that an MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process, as defined in § 63.2550, that satisfies all of the conditions specified in paragraphs (b)(1) through (3) of this section. An MCPU also includes any assigned storage tanks and transfer racks;

- equipment in open systems that is used to convey or store water having the same concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials described in paragraphs (b)(1)(i) through (v) of this section.
- 5. Subpart FFFF, at 40 C.F.R. § 63.2480(a), requires that you must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section.
- 6. Subpart FFFF, at 40 C.F.R. § 63.2550, defines "equipment" as each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in organic HAP service; and any control devices or systems used to comply with Table 6 to this subpart.
- 7. Subpart FFFF, at 40 C.F.R. § 63.2550, defines "in organic HAP service" as a piece of equipment that either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of §63.180(d).
- 8. Table 6 of Subpart FFFF requires that all equipment in organic HAP service must comply with the requirements of either 40 C.F.R. part 63, subpart UU, or subpart H, and the requirements referenced therein, except as specified in § 63.2480(b) and (d), or 40 C.F.R. part 65, subpart F, and the requirements referenced therein, except as specified in § 63.2480(c) and (d).
- 9. Subpart FFFF, at 40 C.F.R. § 63.2485(e), states for individual drain systems, "[t]he provisions of § 63.136(e)(3) apply except as specified in paragraph (e)(1) of this section. (1) A sewer line connected to drains that are in compliance with § 63.136(e)(1) may be vented to the atmosphere, provided that the sewer line entrance to the first downstream junction box is water sealed and the sewer line vent pipe is designed as specified in § 63.136(e)(2)(ii)(A)."

NESHAP for the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (Subpart G)

- 10. On April 22, 1994, EPA promulgated Subpart G, 59 Fed. Reg. 19468 (April 22, 1994).
- 11. Subpart G, at 40 C.F.R. § 63.111, defines a "sewer line" as "... a lateral, trunk line, branch line, or other conduit including, but not limited to, grates, trenches, etc., used to convey wastewater streams or residuals to a downstream waste management unit."
- 12. Subpart G, at 40 C.F.R. § 63.136(e)(3), states "[e]ach sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visible gaps or cracks in joints, seals, or other emission interfaces."

NESHAP for Equipment Leaks – Control Level 2 (Subpart UU)

- 13. On June 29, 1999, EPA promulgated the Subpart UU, 64 Fed. Reg. 34899 (June 29, 1999).
- 14. Subpart UU, at 40 C.F.R. § 63.1033(b)(1), requires that each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §§ 63.1021(b), 63.1036, 63.1037, and paragraphs (c) and (d) of this section. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance. The operational provisions of paragraphs (b)(2) and (b)(3) of this section also apply.
- 15. Subpart UU, at 40 C.F.R. § 63.1020, defines "open-ended valve or line" as any valve, except relief valves, having one side of the valve seat in contact with process fluid and one side open to atmosphere, either directly or through open piping.
- 16. Subpart UU, at 40 C.F.R. § 63.1023(a), requires that the owner or operator of a regulated source subject to this subpart shall monitor regulated equipment as specified in paragraph (a)(1) of this section for instrument monitoring and paragraph (a)(2) of this section for sensory monitoring.
- 17. Subpart UU, at 40 C.F.R. § 63.1023 (a)(1)(i), requires that valves in gas and vapor service and in light liquid service shall be monitored pursuant to § 63.1025(b).
- 18. Subpart UU, at 40 C.F.R. § 63.1025(b)(1), requires that valves shall be monitored to detect leaks by the method specified in § 63.1023(b) and, as applicable, § 63.1023(c).
- 19. Subpart UU, at 40 C.F.R. § 63.1023(b)(1), requires that instrument monitoring shall comply with Method 21 of 40 C.F.R. Part 60, Appendix A (Method 21).
- 20. Section 8.3.1 of Method 21 of states that you must "[p]lace the probe inlet at the surface of the component interface where leakage could occur. Move the probe along the interface periphery while observing the instrument readout. If an increased meter reading is observed, slowly sample the interface where leakage is indicated until the maximum meter reading is obtained. Leave the probe inlet at this maximum reading location for approximately two times the instrument response time."
- 21. Subpart UU, at 40 C.F.R. § 63.1029(b), requires "... pumps, valves, connectors, and agitators in heavy liquid service ... shall be monitored within 5 calendar days by the method specified in § 63.1023(b) and, as applicable, § 63.1023(c), if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method, unless the potential leak is repaired as required in paragraph (c) of this section."
- 22. Subpart UU, at 40 C.F.R. § 63.1024(a), states the owner or operator shall repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected,

except as provided in paragraphs (d) and (e) of this section. A first attempt at repair as defined in this subpart shall be made no later than 5 calendar days after the leak is detected.

General Allegations

- 23. Solvay owns and operates a resin manufacturing plant at 17005 State Route 7, Marietta, Ohio ("Plant"), which is a major source of HAPs, as defined in 40 C.F.R. § 63.2 of Subpart A.
- 24. Solvay owns or operates MCPUs as defined at 40 C.F.R. § 63.2435(b), in the resin manufacturing process at the Plant, which are subject to the requirements of 40 C.F.R. Part 63, Subpart FFFF and, by reference, Subpart UU and Subpart G. The process vents, storage vessels, transfer operations, and wastewater at the Plant are also subject to the requirements at 40 C.F.R. Part 63, Subpart G.
- 25. From May 11, 2010, through May 13, 2010, EPA conducted a CAA investigation of the plant hereafter referred to as the "2010 inspection".

Alleged Violations

- 26. During the 2010 inspection, EPA found that five open-ended lines were not equipped with a cap, blind flange, plug, or a second valve. Additionally, one open-ended line was visually leaking. Solvay failed to properly equip the open-ended lines in violation of 40 C.F.R. §§ 63.2480(a) and 63.1033(b)(1).
- 27. During the 2010 inspection, EPA performed monitoring for HAP leaks using Method 21 and found a significantly higher leak rate on valves located in the resin plant than that reported by Solvay on previous and current monitoring equipment subject to Subpart FFFF. EPA found 10 out of 420 valves leaking in the Udel Resin Unit process, for a leak rate of 2.38%. Solvay's historical quarterly monitoring indicates the highest leak rate found was 0.36% for the period of January 2009 through May 2010. Solvay has conducted deficient Method 21 leak monitoring of valves subject to Subpart UU at the facility by failing to slowly sample the interface where leakage is indicated until the maximum meter reading is obtained, in violation of 40 C.F.R. § 63.1025(b)(1) and Section 8.3.1 of Method 21.

Components	Identification	EPA measurement (ppm)
Valve	20-3146	580
Valve	20-3901	8,000
Valve	20-0302	2,100
Valve	20-0318	640
Valve	20-1996	750
Valve	20-2551	650
Valve	20-0349	1,050
Valve	20-2544	550

Valve	20-1713	2,000
Valve	20-1718	650

- 28. During the 2010 inspection, EPA found five connectors to be visually leaking, listed below. Solvay failed to monitor the connectors within 5 calendar days of discovering evidence of a leak, in violation of 40 C.F.R. §§ 63.1029(b) and 63.2480(a).
 - a. 20-1305
 - b. 20-1952
 - c. 20-0696
 - d. 20-0344
 - e. 20-0918
- 29. During the 2010 inspection, EPA examined facility records indicating that, at Solvay's Udel process, from the time period May 9, 2009, to May 11, 2010, Solvay failed to make a first attempt at repair of two valves within 5 calendar days and failed to repair completely six valves within 15 days. Also, at Solvay's Radel process from the time period May 10, 2008, to May 11, 2010, Solvay failed to make a first attempt at repair of one valve within 5 calendar days and failed to repair six pumps and two valves within 15 days. All component tag numbers are listed below. These failures are in violation of 40 C.F.R. §§ 63.1024(a) and 63.2480(a).

Late:	Udel:
1st Attempt	Valves 203148, 202695
Repair	Valves 203987, 202695, 200077, 203437, 203069, 203208
Late:	Radel:
1st Attempt	Valve 500797
Pumps 500779, 501533, 502949, 600002, 600017, 600023	
Repair	Valves 500797, 501943

30. During the 2010 inspection, EPA found sewer lines to have HAP emissions that were released to the atmosphere, in violation of 40 C.F.R. §§ 63.136(e)(3) and 40 C.F.R. § 63.2485(e).

Environmental Impact of Violations

31. These violations have caused or can cause excess emissions of HAPs. Violation of the NESHAP standards can result in excess HAP emissions that may cause serious health effects, such as birth defects and cancer, and harmful environmental and ecological effects.

Date: /2/28/11

Cheryl 占 Newton

Director

Air and Radiation Division

CERTIFICATE OF MAILING

I, Tracy Jamison, certify that I sent a Finding of Violation, No. EPA-5-11-OH-06, by Certified Mail, Return Receipt Requested, to:

Mark Potochnik, Environmental Manager Solvay Advanced Polymers 17005 State Route 7 Marietta, Ohio 45750

I also certify that I sent copies of the Finding of Violation by first class mail to:

Bob Hodanbosi Chief, Division of Air Pollution Control Ohio Environmental Protection Agency 1800 WaterMark Drive Columbus, Ohio 43266-1049

on the 39th day of Devember, 2011.

Tracy Jamison

Office Automation Assistant

Planning and Administration Section

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7673 8972